



Mineral Industry Surveys

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LEAD IN MARCH 2004

Domestic mine production, based on the net quantity of lead recovered from concentrate, increased by 2% in March compared with production in February, according to the U.S. Geological Survey. Mine production for the first quarter of 2004 was down by 9% compared with that of the same period in 2003. Secondary refinery production increased by 2% in March, and reported consumption remained essentially unchanged compared with that of the previous month. Secondary production and reported consumption through the first 3 months of 2004 were each up by about 3% compared with that of the same period in 2003.

According to the Platts Metals Week published quotations for March, the average North American producer price of lead increased by 5.1%. The average London Metal Exchange Ltd. (LME) cash price (U.S. dollars) decreased by 0.2%, bringing to an end the significant gains made in recent months. The average price for the first quarter of 2004 however, remained at a level approaching the peak average price last reached in the third quarter of 1990. The decline in LME stocks continued at a slower pace in March; the net fall in inventories was only 2,300 t, the smallest monthly decrease since June 2003. In North America, the lead market tightened somewhat in March; a shortfall in primary lead supply was mostly offset by a stronger output of secondary lead. In Europe, lead demand weakened in most parts of the Continent as a significant number of battery producers were reported to be holding appreciably higher than anticipated lead inventories following the winter battery replacement season. Consequently, many consumers were beginning to reduce their orders for refined lead from the lead producers. Asian lead demand remained strong, and the output of refined lead in China continued to increase at a significant rate. Exports of Chinese lead to Asian markets were expected to increase in 2004 at the expense of non-Asian trade. Chinese trade data for the first 2 months of the year showed a sharp decline in shipments to Europe, essentially no refined lead being shipped to the United States, and a sharp increase in shipments to other Asian markets (CRU International Ltd., 2004).

The National Defense Stockpile (NDS) aggregated cash disposal (sale) of lead in March under the monthly Basic Ordering Agreement, DLA-Lead-005, was 2,149 metric tons (t) (2,369 short tons). Sales of lead in the first 6 months of fiscal

year 2004 (October 2003 through March 2004) totaled 27,916 t (30,772 short tons) (Defense National Stockpile Center, 2004b).

The Defense National Stockpile Center forwarded the proposed revised fiscal year 2004 and fiscal year 2005 Annual Materials Plans (AMP) to the U.S. Congress on March 9. No changes were proposed to the fiscal year 2004 AMP for lead of 54,430 t (60, 000 short tons). A similar AMP for lead was proposed for fiscal year 2005, subject to the limit of the remaining lead inventory in the NDS (Defense National Stockpile Center, 2004a).

Update

The Standing Committee of the International Lead and Zinc Study Group (ILZSG) held its spring meeting in London on April 27, at which time ILZSG reported its outlook for lead in 2004. A forecast rise of 1.6% in world consumption was expected to be driven mainly by further growth in China. In the United States and Europe, demand in 2004 was expected to remain at similar levels to those of 2003. A small rise of 0.8% was expected in lead mine output, with increases in Ireland, Sweden, Morocco and Peru, offsetting declines in Australia and the United States. World production of refined lead was anticipated to decline by 0.4% in 2004. Although a 5.8% rise was expected in Asian production, this is expected to be exceeded by production declines in Australia, Europe, and the United States. A deficit of nearly 130,000 t in the western world refined lead market was anticipated in 2004 (International Lead and Zinc Study Group, 2004).

References Cited

CRU International Ltd., 2004, Market commentary: CRU Monitor—Lead, April, p. 2.

Defense National Stockpile Center, 2004a, FY 2004 revised annual materials plan and FY 2005 annual materials plan sent to congress: Fort Belvoir, VA, U.S. Defense National Stockpile Center news release, March 29, 4 p.

Defense National Stockpile Center, 2004b, Stockpile announces lead sales for March 2004: Fort Belvoir, VA, U. S. Defense National Stockpile Center news release, April 8, 1 p.

International Lead and Zinc Study Group, 2004, ILZSG Spring meeting/forecasts: London, England, International Lead and Zinc Study Group press release, April 27, 4 p.

 $\label{eq:table 1} \textbf{TABLE 1}$ SALIENT LEAD STATISTICS IN THE UNITED STATES 1

(Metric tons, lead content, unless otherwise specified)

	200)3	2004			
	January -	January -			January -	
	December	March	February	March	March	
Production:						
Mine (recoverable)	449,000	110,000	32,800 ^r	33,300	101,000	
Primary refinery	NA	NA	NA	NA	NA	
Secondary refinery:	<u> </u>					
Reported by smelters/refineries	1,120,000	273,000 ^r	92,000 ^r	94,100	280,000	
Estimated	11,400	2,750 °	929 ^r	950	2,820	
Recovered from copper-base scrap ^e	15,000	3,750	1,250	1,250	3,750	
Total secondary	1,150,000	279,000 ^r	94,200 ^r	96,300	286,000	
Stocks, end of period:						
Primary refineries	NA	NA	NA	NA	NA	
Secondary smelters and consumers	85,800	80,800 ^r	70,200 ^r	66,300	66,300	
Imports for consumption:						
Base bullion	6			NA	²	
Refined metal	175,000	47,000	14,500	NA	27,500 ²	
Consumption:	_					
Reported	1,350,000	337,000 ^r	115,000	115,000	346,000	
Undistributed ^e	41,800	10,400 ^r	3,550 ^r	3,560	10,700	
Total	1,390,000	347,000 ^r	118,000	119,000	356,000	
Exports:	<u></u>					
Ore and concentrates	253,000	30,700	14,600	NA	16,400 ²	
Bullion	593	331		NA	8 2	
Wrought and unwrought lead	123,000	17,200	11,300	NA	24,500 ²	
TEL/TML preparations, based on lead compounds	517	127	26	NA	60 ²	
Exports (gross weight): Scrap	92,800	23,300	5,770	NA	10,200 ²	
Platts Metals Week North American producer						
price (cents per pound)	43.76	43.58	49.41	51.94	49.40	

^eEstimated. ^rRevised. NA Not available. -- Zero.

TABLE 2 MONTHLY AVERAGE LEAD PRICES

	North American producer price	LN	ME	Sterling exchange rate	
	cents/lb	\$/metric ton	£/metric ton	\$/£	
2003:					
March	43.58	456.36	288.38	1.582471	
December	44.30	691.69	394.89	1.751605	
Year	43.76	514.62	313.88	1.634750	
2004:					
January	46.86	757.95	415.21	1.825465	
February	49.41	887.99	475.54	1.867295	
March	51.94	885.98	485.18	1.826100	

Source: Platts Metals Week.

¹Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

²Includes data for January - February only; March data not available at time of publication.

${\bf TABLE~3}$ CONSUMPTION OF PURCHASED LEAD-BASE SCRAP 1

(Metric tons, gross weight)

Item	Stocks February 29, 2004	Net receipts	Consumption	Stocks March 31, 2004
Battery-lead	16,500 ^r	99,600	103,000	13,300
Soft lead	W	W	W	W
Drosses and residues	1,910 ^r	2,330	2,210	2,030
Other ²	1,330 ^r	1,810	1,560	1,580
Total	19,800 ^r	104,000	107,000	16,900
Percent change from preceding month	XX	+3.8	+3.7	-14.5

^rRevised. W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

 ${\bf TABLE~4} \\ {\bf LEAD, TIN, AND~ANTIMONY~RECOVERED~FROM~} \\ {\bf LEAD-BASE~SCRAP~IN~MARCH~2004}^1 \\ \\$

(Metric tons)

	Secondary metal content					
Product recovered	Lead	Tin	Antimony			
Soft and calcium lead	62,100					
Remelt lead	W	W	W			
Antimonial lead	31,500	W	W			
Other ²	W	W				
Total	94,100	40	349			

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

¹Data are rounded to no more than three significant digits.

²Includes cable lead, lead-base babbitt, solder, type metals, and other products.

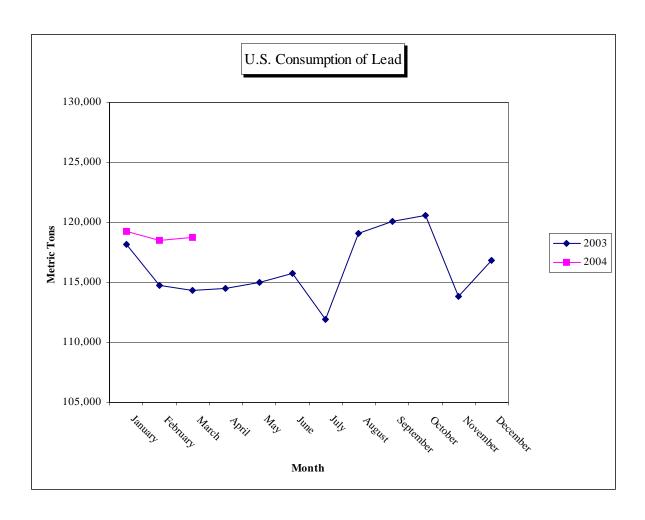
 $\label{eq:table 5} {\sf CONSUMPTION} \mbox{ OF LEAD IN THE UNITED STATES}^1$

(Metric tons, lead content)

	200	3		2004		
	January -	January -			January -	
Uses	December	Marchr	February	March	March	
Metal products:						
Ammunition, shot and bullets	51,600	12,600	4,260	4,200	14,100	
Brass and bronze, billet and ingots	3,400	725	333	360	1,030	
Cable covering, power and communication						
and calking lead, building construction	4,990	1,490	406	434	1,160	
Casting metals	33,300	8,330	2,780	2,790	8,340	
Sheet lead, pipes, traps and other extruded products	23,800	5,870	1,430 ^r	2,000	5,240	
Solder	1,650	406	629	146	932	
Storage batteries, including oxides	1,130,000	283,000	97,700	97,800	293,000	
Terne metal, type metal, and other metal products ²	15,200	3,810	1,270	1,270	3,810	
Total metal products	1,270,000	316,000	109,000	109,000	328,000	
Other oxides and miscellaneous uses	83,900	21,100	6,110 ^r	6,130	17,900	
Total reported	1,350,000	337,000	115,000	115,000	346,000	
Undistributed consumption ^e	41,800	10,400	3,550 ^r	3,560	10,700	
Grand total	1,390,000	347,000	118,000	119,000	356,000	

^eEstimated. ^rRevised.

²Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.



 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

$\label{eq:table 6} \text{CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS,} \\ \text{AND CONSUMPTION OF LEAD}^1$

(Metric tons, lead content)

	Stocks			Stocks
	Febuary 29,	Net		March 31,
Type of material	2004	receipts	Consumption	2004
Soft lead	37,700	60,800	63,500	35,000
Antimonial lead	17,500 ^r	30,400	31,600	16,300
Lead alloys	W	19,500	19,500	W
Copper-base scrap	W	95	89	W
Total	70,200 ^r	111,000	115,000	66,300

^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Total."

 $\label{eq:table 7} \text{U.S. EXPORTS OF LEAD, BY CLASS}^1$

(Metric tons)

				2004			
	2003				January -		
	Year	February	January	February	February		
Lead content:							
Ore and concentrates	253,000	15,100	1,810	14,600	16,400		
Bullion	593		8		8		
Materials excluding scrap	123,000	6,430	13,200	11,300	24,500		
TEL/TML preparations, based	•						
on lead compounds	517	22	35	26	60		
Total	377,000	21,600	15,000	25,900	40,900		
Gross weight: Scrap	92,800	5,890	4,390	5,770	10,200		

⁻⁻ Zero.

Source: U.S. Census Bureau.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

 ${\it TABLE~8} \\ {\it U.S.~IMPORTS~OF~LEAD~BY~TYPE~OF~MATERIALS~AND~BY~COUNTRY~OF~ORIGIN}^1 \\$

(Metric tons, lead content)

		C	eneral impoi	rts		Imports for consumption				
	20	003		2004		20	03		2004	
		January -			January -		January -			January -
Country of origin	Year	February	January	February	February	Year	February	January	February	February
Base bullion:										
Argentina	5					5				
Germany	1					1				
Total	6					6				
Pigs and bars:										
Australia	10,100	10,100				107				
Canada	167,000	26,300	12,300	12,500	24,800	167,000	26,300	12,300	12,500	24,800
China	1		2		2	1		2		2
Germany				44	44				44	44
Mexico	8,270	2,880	337	1,990	2,330	8,270	2,880	337	1,990	2,330
Other	259	4	381	8	389	259	1	381	8	389
Total	186,000	39,300	13,000	14,500	27,500	175,000	29,200	13,000	14,500	27,500
Grand total	186,000	39,300	13,000	14,500	27,500	175,000	29,200	13,000	14,500	27,500

⁻⁻ Zero.

Source: U.S. Census Bureau.

¹Data are rounded to no more than three significant digits; may not add to totals shown.